Mr. Michael Burke
Criterion Catalyst Company, L.P.
1800 East U.S. Highway 12
Michigan City, IN 46360

Re: Minor Source Modification No:
091-11692-00053

Dear Mr. Burke:

Criterion Catalyst Company, L.P. applied for a Part 70 operating permit on October 1, 1996 for manufacturing of catalyst. An application to modify the source was received on December 22, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for modification at the source:

(a) One (1) catalyst drier, identified as DCC(drying/calcining/cooling) unit, rated at ten(10) million British thermal units (MMBtu) per hour, with a maximum calcining/drying/cooling capacity of 570.8 pounds of DN190 per hour and a maximum calcining/drying/cooling capacity of 462.3 pounds of DC2000 per hour, using a baghouse as a control, and exhausting to stack P4.

(b) One (1) high temperature drier, identified as SEACAP drier, rated at 1.2 million British thermal units (MMBtu) per hour, with a maximum drying capacity of 570.8 pounds of DN190 per hour and a maximum drying capacity of 462.3 pounds of DC2000 per hour, using a baghouse as a control, and exhausting to stack P3.

(c) One (1) low temperature drier, identified as SD-3, rated at four (4) million British thermal units (MMBtu) per hour, with a maximum drying capacity of 570.8 pounds of DN190 per hour and a maximum drying capacity of 462.3 pounds of DC2000 per hour, using no controls, and exhausting to stack P2.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Shantanu Pahi or extension 3-0868, or dial (317) 233-0868.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Spahi

cc: File - LaPorte County
U.S. EPA, Region V
LaPorte County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Rick Reynolds
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

Criterion Catalyst Company, L.P.
1800 East U.S. Highway 12
Michigan City, Indiana 46360-2074

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 091-11692-00053	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary catalyst manufacturing plant.

Responsible Official:	Michael Burke
Source Address:	1800 East U.S. Highway 12, Michigan City, Indiana 46360
Mailing Address:	1800 East U.S. Highway 12, Michigan City, Indiana 46360
Phone Number:	(219) 874-6211
SIC Code:	2819
County Location:	LaPorte
County Status:	Nonattainment for SO_X Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to operate the following emission units and pollution control devices:

(a) One (1) catalyst drier, identified as DCC(drying/calcining/cooling) unit, rated at ten(10) million British thermal units (MMBtu) per hour, with a maximum calcining/drying/cooling capacity of 570.8 pounds of DN190 per hour and a maximum calcining/drying/cooling capacity of 462.3 pounds of DC2000 per hour, using a baghouse as a control, and exhausting to stack P4.

(b) One (1) high temperature drier, identified as SEACAP drier, rated at 1.2 million British thermal units (MMBtu) per hour, with a maximum drying capacity of 570.8 pounds of DN190 per hour and a maximum drying capacity of 462.3 pounds of DC2000 per hour, using a baghouse as a control, and exhausting to stack P3.

(c) One (1) low temperature drier, identified as SD-3, rated at four (4) million British thermal units (MMBtu) per hour, with a maximum drying capacity of 570.8 pounds of DN190 per hour and a maximum drying capacity of 462.3 pounds of DC2000 per hour, using no controls, and exhausting to stack P2.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment i are in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.8 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.9 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(b) In the case of continuous opacity monitoring, whenever the continuous opacity monitor is malfunctioning or will be down for repairs or adjustments for a period of four (4) hours

or more, visible emission readings should be performed in accordance with 40 CFR 60, Appendix A, Method 9, beginning four (4) hours after the start of the malfunction or down time for a minimum of one (1) hour.

(c) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.

(d) Method 9 opacity readings shall repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.

(e) The opacity readings during this period shall be reported in the quarterly Compliance Monitoring Reports, unless there are ANY observed six minute averaged exceedances, in which case, these shall be reported to the air compliance inspector within four (4) working hours.

(f) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.11 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.12 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.13 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) One (1) catalyst drier, identified as DCC(drying/calcining/cooling) unit, rated at ten(10) million British thermal units (MMBtu) per hour, with a maximum calcining/drying/cooling capacity of 570.8 pounds of DN190 per hour and a maximum calcining/drying/cooling capacity of 462.3 pounds of DC2000 per hour, using a baghouse as a control, and exhausting to stack P4.

(b) One (1) high temperature drier, identified as SEACAP drier, rated at 1.2 million British thermal units (MMBtu) per hour, with a maximum drying capacity of 570.8 pounds of DN190 per hour and a maximum drying capacity of 462.3 pounds of DC2000 per hour, using a baghouse as a control, and exhausting to stack P3.

(c) One (1) low temperature drier, identified as SD-3, rated at four (4) million British thermal units (MMBtu) per hour, with a maximum drying capacity of 570.8 pounds of DN190 per hour and a maximum drying capacity of 462.3 pounds of DC2000 per hour, using no controls, and exhausting to stack P2.

D.1.1 Particulate Matter (PM) [326 IAC 6-3]

(a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the DCC drier shall not exceed 2.63 pounds per hour when operating at a process weight rate of 1033.11 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The new allowable emissions of 2.63 pound per hour from above replaces the particulate matter(PM) limit of the operation condition no.10 of CP 091-8507-00053 issued on July 31, 1997.

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the SEACAP drier shall not exceed 2.63 pounds per hour when operating at a process weight rate of 1033.11 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The new allowable emissions of 2.63 pound per hour from above replaces the particulate matter(PM) limit from the registration CP 091-6543-00053 issued on October 7,1996.

(c) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the SD-3 drier shall not exceed 2.63 pounds per hour when operating at a process weight rate of 1033.11 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.2 Particulate Matter [326 IAC12, (40 CFR 60.730, Subpart UUU)]

Each owner of operator that is subject to 40 CFR 60.730 shall comply with the emission limitations set forth in this condition on and after the date on which the initial performance test required by 40 CFR 60.80 is completed, but not later than 180 days after the initial startup, whichever date comes first. No emissions shall be discharged into the atmosphere from any affected facility(DCC drier) that:

(a) Contains particulate matter in excess of 0.057 g/dscm for the DCC drier.

(b) Exhibits greater than 10 percent opacity.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC12, (40 CFR 60.730, Subpart UUU)]

(a) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use the test methods in appendix A of 40 CFR 60 or other test methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) The owner or operator shall determine compliance with particulate matter standards in condition D.1.2 as follows:

(1) Method 5 shall be used it determine the particulate matter concentration. The sampling time and volume for each test run shall be two hours and 1.70 dscm.

(2) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions.

In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.1.5 Particulate Matter (PM)

(a) The baghouse for PM control shall be in operation and control emissions from the DCC drier at all times that the DCC drier is in operation.

(b) The baghouse for PM control shall be in operation and control emissions from the SEACAP drier at all times that the SEACAP drier is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Daily visible emission notations of the DCC drier, SEACAP drier and SD-3 drier stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.7 Monitoring of Emissions and Operations [326 IAC12, (40 CFR 60.730, Subpart UUU)]

Each owner or operator who uses a dry control device (baghouse) to comply with the mass emission standard(condition D.1.2) shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.

D.1.8 Baghouse Inspections

An inspection of the baghouses shall be performed as often as the production line being controlled is on a shutdown. Defective bags shall be replaced. A record shall be kept of the results of the inspection and the number of bags replaced. This condition replaces operation condition no. 11(d) from the CP 091-8507-00053 issued on July 31, 1997.

D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the DCC drier, SEACAP drier and SD-3 drier stack exhaust.

(b) Records of the measurements required in condition D.1.7 for monitoring of emissions and operations shall be retained for at least two(2) years.

D.1.11 Reporting Requirements [326 IAC12, (40 CFR 60.730, Subpart UUU)]

Each owner ir operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by the condition D.1.7 for monitoring of emissions and operations. For the purpose of these reports, exceedances are defined as follows:

(i) All 6-minute periods during which the average opacity from the dry control is greater than 10 percent.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Criterion Catalyst Company, L.P.
Source Address: 1800 East, U.S. Highway 12, Michigan City, Indiana 46360
Mailing Address: 1800 East, U.S. Highway 12, Michigan City, Indiana 46360
Source Modification No.: 091-11692-00053

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Part 70 ***Minor*** Source Modification

Source Background and Description

Source Name:	***Criterion Catalyst Company, L.P.***
Source Location:	***1800 East US 12, Michigan City, Indiana***
County:	***Laporte***
SIC Code:	***2819***
Operation Permit No.:	**091-6789-00053**
Operation Permit Issuance Date:	***Not yet Issued***
***Minor* Source Modification No.:**	**091-11692-00053**
Permit Reviewer:	***Spahi***

The Office of Air Management (OAM) has reviewed a modification application from Criterion Catalyst Company, L.P. relating to the modification of the following emission units and pollution control devices:

(a) One (1) catalyst drier, identified as DCC(drying/calcining/cooling) unit, rated at ten(10) million British thermal units (MMBtu) per hour, with a maximum calcining/drying/cooling capacity of 570.8 pounds of DN190 per hour and a maximum calcining/drying/cooling capacity of 462.3 pounds of DC2000 per hour, using a baghouse as a control, and exhausting to stack P4.

(b) One (1) high temperature drier, identified as SEACAP drier, rated at 1.2 million British thermal units (MMBtu) per hour, with a maximum drying capacity of 570.8 pounds of DN190 per hour and a maximum drying capacity of 462.3 pounds of DC2000 per hour, using a baghouse as a control, and exhausting to stack P3.

(c) One (1) low temperature drier, identified as SD-3, rated at four (4) million British thermal units (MMBtu) per hour, with a maximum drying capacity of 570.8 pounds of DN190 per hour and a maximum drying capacity of 462.3 pounds of DC2000 per hour, using no controls, and exhausting to stack P2.

History

On December 22,1999, Criterion Catalyst Company, L.P. submitted an application to the OAM for the manufacturing of a new catalyst(DC2000) in their existing facilities. Criterion Catalyst Company, L.P. applied for a Part 70 permit on October 1,1996, which is still pending. Some conditions from the CP 091-8507-00053(DCC drier) issued on July 31,1997 and R 091-6543-00053(SEACAP drier) issued on October 7, 1996 were incorporated into this permit. Conditions and emissions relating to the firing of natural gas from the DCC and SEACAP driers were not

included in this permit. The natural gas emissions from the SD-3(low temperature drier) were also not included in this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 22,1999.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	3.4*
PM-10	3.4*
SO_2	0.0
VOC	23.82
CO	31.56
NO_x	0.0

* The baghouses were already installed on the DCC and SEACAP driers, so the PM/PM10 emissions from these driers were taken after controls (baghouse) because the control equipment is federally enforceable. The PM/PM10 emissions from the SD-3 drier are before control.

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(4)(B) & (D) because the potential to emit of volatile organic compounds(VOCs) is more than ten (10) tons per year but less than twenty five(25) tons per year and potential to emit of carbon monoxide (CO) is more

than twenty five (25) tons per year but less than one hundred (100) tons per year.

County Attainment Status

The source is located in LaPorte County.

Pollutant	Status
PM-10	attainment
SO_2	maintenance
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. LaPorte County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) LaPorte County has been classified as attainment or unclassifiable for CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	192.59
PM-10	192.59
SO_2	0.23
VOC	19.52
CO	21.49
NOx	49.27

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

(b) These emissions are based upon past permits issued to this source.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
DCC	0.30	0.30	5.10	24.81	32.81	0.95	
High Temp. Drier	2.79	2.79	0.78	3.72	4.03	0.36	
Low Temp. Drier	0.31	0.31	3.18	12.18	7.29	0.28	-
Total	3.40	3.40	9.06	40.71	44.13	1.59	

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

(a) The DCC drier is subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.730, Subpart UUU) because the alumina content of the catalyst (DC2000) is more than fifty percent(50%).

1. Standards for Particulate Matter:

Each owner of operator that is subject to 40 CFR 60.730 shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test required by 40 CFR 60.80 is completed, but not later than 180 days after the initial startup, whichever date comes first. No emissions shall be discharged into the atmosphere from any affected facility that:

(a) Contains particulate matter in excess of 0.057 g/dscm for the DCC drier.
(b) Exhibits greater than 10 percent opacity.

2. Monitoring of emissions and operations:

Each owner or operator who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.

3. Record Keeping and Reporting Requirements:

Records of the measurements required in section 2 for monitoring of emissions and operations shall be retained for at least two(2) years.

Each owner ir operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by the section 2 for monitoring of emissions and operations. For the purpose of these reports, exceedances are defined as follows:

(i) All 6-minute periods during which the average opacity from the dry control is greater than 10 percent.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

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State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

1. DCC:

Total process weight is 5,000,000 lbs DN190/yr and 4,050,0000 lbs DC2000
P= 9,050,000lbs/8760hr = 1033.11 lbs/hr

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

$E = 4.10\ (1033.11/2000)^{0.67} = 2.63$ pounds per hour

The PTE after controls of the DCC drier is 0.30 tons DC2000/yr and PTE of DN190 is 0.96 tons per year, so the total PTE of the DCC drier is 1.26 tons/yr.

So the PTE after controls is 1.26 tons/yr x 2000lbs/1 ton x 1 yr/8760 hrs = 0.29 pounds per hour. So this DCC drier meets this rule.

The baghouse shall be in operation at all times the DCC drier is in operation, in order to comply with this limit.

The new allowable emissions of 2.63 pound per hour from above replaces the particulate matter(PM) limit of the operation condition no.10 of CP 091-8507-00053 issued on July 31, 1997.

2. HTD:

Total process weight is 5,000,000 lbs DN190/yr and 4,050,0000 lbs DC2000
P= 9,050,000lbs/8760hr = 1033.11 lbs/hr

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and

P = process weight rate in tons per hour

$E = 4.10\ (1033.11/2000)^{0.67} = 2.63$ pounds per hour

The PTE after controls of the HTD drier is 2.79 tons DC2000/yr and PTE of DN190 is 7.14 tons per year, so the total PTE of the HTD drier is 9.93 tons/yr.

So the PTE after controls is 9.93 tons/yr x 2000lbs/1 ton x 1 yr/8760 hrs = 2.27 pounds per hour. So this HTD drier meets this rule.

The baghouse shall be in operation at all times the HTD drier is in operation, in order to comply with this limit.

The new allowable emissions of 2.63 pound per hour from above replaces the particulate matter(PM) limit from the registration CP 091-6543-00053 issued on October 7,1996.

3. LTD:

Total process weight is 5,000,000 lbs DN190/yr and 4,050,0000 lbs DC2000
P= 9,050,000lbs/8760hr = 1033.11 lbs/hr

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

$E = 4.10\ (1033.11/2000)^{0.67} = 2.63$ pounds per hour

The PTE of the LTD drier is 0.31 tons DC2000/yr and PTE of DN190 is 1.66 tons per year, so the total PTE of the HTD drier is 1.97 tons/yr.

So the PTE is 1.97 tons/yr x 2000lbs/1 ton x 1 yr/8760 hrs = 0.45 pounds per hour. So this LTD drier meets this rule

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 091-11692-00053.